NOTES ON THE GENUS LACON (ELATERIDAE)

By Ross H. Arnett, Jr.

The type of the genus *Lacon* Castelnau is *Lacon atomarius* (Fabricius), designated by Hyslop, 1921. Unfortunately, the type specimen of this species is unavailable, so that its zoological characters cannot be determined. However, a study of the literature has revealed some evidence which I believe is sufficient for a good working basis for determining the characters to be ascribed to the genus *Lacon*.

In my recent paper on the Nearctic Adelocerina[1] I considered (on page 117) *Elater murinus* Linnaeus, 1758, as the earliest name for *Elater atomarius* Fabricius, 1798, the type of the genus *Lacon* Castelnau, 1836. Further study, given in the notes below, has shown the following synonymy to be probably correct:

Lacon punctatus (Herbst, 1779)
carbonarius (Schrank, 1781)
pulverulentus (Panzer, 1795)
atomarius (Fabricius, 1798)

Synonymical notes. Elater punctatus Herbst, 1779, Beschäftigungen der Berlinischen Gesellschaft naturforschender Freunde, vol. 4, p. 316, pl. 7, fig. 1. The figure agrees with the description of this species and is recognizable as a member of the subtribe Adelocerina. I have found no evidence to indicate any disagreement between the figure and the description, even though Panzer apparently thought otherwise, as is indicated under the note on *Elater pulverulentus* below.

Elater carbonarius Schrank, 1781, Enumeratio insectorum Austriae indigenorum, p. 184. This species is treated by Candèze, 1891 (Catalogue methodique des Élatèrides, p. 12) as the valid name, with *E. atomarius* Fabricius, *E. punctata* Herbst, and *E. pulverulenta* Panzer as synonyms. On the basis of Candeze's synonymy, I here include this species as a synonym of *E. punctatus* Herbst.

Elater pulverulentus Panzer, 1795, Deutschlands Insectenfauna, p. 235 [not Herbst, 1786, *in* Fuessley, Archiv der Insectengeschichte, vol. 7, p. 172, a synonym of *Chalcolepidius porcatus* (L.)]. The Panzer species is a new name for the figure of

[1]Arnett, R. H., Jr. A review of the Nearctic Adelocerina (Coleoptera: Elateridae, Pyrophorinae, Pyrophorini). Wasmann Journ. Biol., vol. 10, pp. 103-126, 1952.

Elater punctatus Herbst, 1779, which Panzer apparently considered different from the description, because he refers to the figure only. So far, as mentioned above, there appears to be no evidence other than this to indicate that the figure of *E. punctatus* is different from the species Herbst described.

Elater atomarius Fabricius, 1798, Supplementum entomologiae systematicae, p. 136. Fabricius lists *Elater pulverulentus* Panzer as a synonym of *E. atomarius*. Apparently Fabricius realized that Panzer's name was a homonym. Panzer's description of *E. pulverulentus* agrees with Fabricius' description of *E. atomarius*, and Candèze treated both of them as synonyms of *E. punctata*. Fabricius gives this species the number 28-9 which means that it is to be inserted between species number 28 and 29 in his Entomologia Systematica, 1792, which contains *E. murinus* L. as number 26, showing that Fabricius considered the two species *E. murinus* and *E. atomarius* as separate species.

Elater murinus Linnaeus, 1758, Systema Naturae, ed. 10, page 406. This species, the type of the genus *Agrypnus* Eschscholtz, 1829, and of *Archontas* Gozis, 1886, is not Nearctic, and belongs in the genus *Adelocera* Latreille, 1829. *E. murinus* was formerly thought to be the type of the genus *Lacon*. This would have placed *Lacon* and *Adelocera* as synonyms because *E. murinus* is congeneric with *E. ovalis* Germar, 1824, the genotype of *Adelocera*. Since it has now been shown that the genotype of *Lacon* is something entirely different, the generic name *Lacon* again becomes available for our Nearctic species. No members of the genus *Adelocera* are found in the Nearctic region. *Adelocera murinus* (Linnaeus) then becomes simply an included species within the old world genus *Adelocera*.

From the above discussion it may be seen that the zoological basis of the genus *Lacon*, if the present synonymy is correct, includes the characters of the species *Elater punctatus* Herbst. The subgenus *Danosoma* Thomson, 1859, then becomes a synonym of *Lacon* because the genotype of *Danosoma* is *Elater conspersa* Gyllenhal, which is congeneric with *Lacon punctatus*.

It has been brought to my attention by several colleagues that the name *Lepidotus* Stephens, 1830 is a homonym of *Lepidotus* Asso, 1801 (Anales de Ciencias Naturales [Madrid], vol. 4, p. 38

(fishes). This unfortunately results in further name changes in the Adelocerina. The subgenus *Lepidotus* Stephens is without a valid name. I therefore here propose the new name *Zalepia* (Gr., very small scales; feminine) to replace the homonym *Lepidotus* Stephens. The genotype of *Zalepia* is automatically the same as that of *Lepidotus* Stephens, which is *Elater varius* Olivier, 1790 by designation of Hyslop, 1921. *Zalepia* includes the Nearctic species, *Z. modesta* (Boisduval), *Z. impressicollis* (Say), *Z. discoidea* (Weber), *Z. aurorata* (Say), *Z. maculata* (LeConte), and *Z. candida* (Fall).

The following is a list of the Nearctic subgenera of *Lacon* as the results of these changes:

Lacon Castelnau 1836; type: *punctatus* (Hbst.)

Subgenus *Lacon* sensu stricto

Danosoma Thomson, 1859 (subjective synonym); type: *conspersa* (Gyll.)

Subgenus *Zalepia* Arnett; type: *varius* (Oliv.)

Lepidotus Stephens (not Asso, 1801); type: *varius* (Oliv.)

Subgenus *Diphyaulon* Arnett, 1952; type: *pyrsolepis* (LeC.)

Subgenus *Aulacon* Arnett, 1952; type: *nobilis* (Fall)

Thus, the fifteen species included in the genus *Lepidotus* in my Nearctic revision are now in the genus *Lacon;* the six species included in the subgenus *Lepidotus* are now in the subgenus *Zalepia;* the four species in the subgenus *Diphyaulon* remain in that subgenus, but as *Lacon* (*Diphyaulon*); the three species in *Aulacon* remain in that subgenus, but as *Lacon* (*Aulacon*), and the two species in the subgenus *Danosoma* are now in the subgenus *Lacon* sensu stricto.